## Supplemental movie legends

**Movies 1, 2, 3, 4.** Live cell imaging studies. *Krt14*<sup>-/-</sup> mouse keratinocytes were transfected with H2B-mCherry (red) and GFP tagged K14WT or cysteine variants (green). Images were recorded using a laser scanner confocal microscope (LSM780-FCS, Carl Zeiss Microscopy). Recording intervals were 5 min and the entire recording time was 6h. (Movie 1) GFP-K14CF-C4/C40-expressing *Krt14*<sup>-/-</sup> mouse keratinocyte showing a lack of perinuclear IF network. (Movie 2) GFP-K14CF-C4/C40-expressing *Krt14*<sup>-/-</sup> mouse keratinocyte showing a perinuclear network. (Movie 3) GFP-K14WT-expressing *Krt14*<sup>-/-</sup> mouse keratinocyte in primary culture. (Movie 4) GFP-K14CF-C4/C40/C367-expressing *Krt14*<sup>-/-</sup> keratinocyte showing an accumulation of keratin filament bundles apposed against the nucleus.